

AMENDMENTS TO THE CLAIMS

Listing of claims:

1. (Currently Amended) A method for providing seamless connectivity and communication in a multi-band, multi-protocol network, the method comprising:

initially authenticating an access device upon said access device initiating communication with a first access point;

providing authentication information related to said initial authentication to at least one of a second access point and a third access point; and

servicing said access device without re-authenticating said access device by one of said ~~first access point~~, said second access point and said third access point based on said initial authentication.

2. (Previously Presented) The method according to claim 1, comprising storing said initial authentication information.

3. (Previously Presented) The method according to claim 2, comprising retrieving said stored initial authentication information by said second access point and said third access point.

4. (Previously Presented) The method according to claim 3, wherein said retrieving comprises retrieving said initial authentication information by said second access point when said access device migrates from a first coverage area associated with said first access point to a second coverage area associated with said second access point.

5. (Previously Presented) The method according to claim 4, wherein said retrieving comprises retrieving said initial authentication information by said third access point when said access device migrates from one of said first coverage area and said second coverage area to a third coverage area associated with said third access point.

6. (Previously Presented) The method according to claim 3, wherein said retrieving comprises retrieving said initial authentication information upon said access device initiating communication with said second access point.

7. (Previously Presented) The method according to claim 3, wherein said retrieving comprises retrieving said initial authentication information upon said access device initiating communication with said third access point.

8. (Previously Presented) The method according to claim 1, comprising distributing said initial authentication information to said second access point and said third access point upon said initial authenticating.

9. (Previously Presented) The method according to claim 5, comprising transparently transferring said initial authentication information to said second access point during a handoff of said access device from said first access point to said second access point.

10. (Previously Presented) The method according to claim 5, comprising transparently transferring said initial authentication information to said third access point during a handoff of said access device from one of said first access point and said second access point to said third access point.

11. (Currently Amended) A computer-readable media, having stored thereon, a computer program having at least one code section for providing seamless connectivity and communication in a multi-band multi-protocol hybrid wired/wireless network, the at least one code section being executable by a machine for causing the machine to perform steps comprising:

initially authenticating an access device upon said access device initiating communication with a first access point;

providing authentication information related to said initial authentication to at least one of a second access point and a third access point; and

servicing said access device without re-authenticating said access device by one of said ~~first access point~~, said second access point and said third access point based on said initial authentication.

12. (Previously Presented) The computer-readable media according to claim 11, wherein said at least one code section comprises code for storing said initial authentication information.

13. (Previously Presented) The computer-readable media according to claim 12, wherein said at least one code section comprises code for retrieving said stored initial authentication information by said second access point and said third access point.

14. (Previously Presented) The computer-readable media according to claim 13, wherein said at least one code section comprises code for retrieving said initial authentication information by said second access point when said access device migrates from a first coverage area associated with said first access point to a second coverage area associated with said second access point.

15. (Previously Presented) The computer-readable media according to claim 14, wherein said at least one code section comprises code for retrieving said initial authentication information by said third access point when said access device migrates from one of said first coverage area and said second coverage area to a third coverage area associated with said third access point.

16. (Previously Presented) The computer-readable media according to claim 13, wherein said at least one code section comprises code for retrieving said initial authentication information upon said access device initiating communication with said second access point.

17. (Previously Presented) The computer-readable media according to claim 13, wherein said at least one code section comprises code for retrieving said initial authentication information upon said access device initiating communication with said third access point.

18. (Previously Presented) The computer-readable media according to claim 11, wherein said at least one code section comprises code for distributing said initial authentication information to said second access point and said third access point upon said initial authenticating.

19. (Previously Presented) The computer-readable media according to claim 15, wherein said at least one code section comprises code for transparently transferring said initial authentication information to said second access point during a handoff of said access device from said first access point to said second access point.

20. (Previously Presented) The computer-readable media according to claim 15, wherein said at least one code section comprises code for transparently transferring said initial authentication information to said third access point during a handoff of said access device from one of said first access point and said second access point to said third access point.

21. (Currently Amended) A system for providing seamless connectivity and communication in a multi-band, multi-protocol network, the system comprising:

at least one processor for initially authenticating an access device upon said access device initiating communication with a first access point;

said at least one processor for providing authentication information related to said initial authentication to at least one of a second access point and a third access point; and

said one of ~~said first access point~~, said second access point and said third access point providing service without re-authenticating ~~[[to]]~~ said access device based on said initial authentication..

22. (Previously Presented) The system according to claim 21, comprising at least one memory for storing said initial authentication information.

23. (Previously Presented) The system according to claim 22, wherein said at least one processor retrieves said stored initial authentication information by said second access point and said third access point.

24. (Previously Presented) The system according to claim 23, wherein said at least one processor retrieves said initial authentication information by said second access point when said access device migrates from a first coverage area associated with said first access point to a second coverage area associated with said second access point.

25. (Previously Presented) The system according to claim 24, wherein said at least one processor retrieves said initial authentication information by said third access point when said access device migrates from one of said first

coverage area and said second coverage area to a third coverage area associated with said third access point.

26. (Previously Presented) The system according to claim 23, wherein said at least one processor retrieves said initial authentication information upon said access device initiating communication with said second access point.

27. (Previously Presented) The system according to claim 23, wherein said at least one processor retrieves said initial authentication information upon said access device initiating communication with said third access point.

28. (Previously Presented) The system according to claim 21, wherein said at least one processor distributes said initial authentication information to said second access point and said third access point upon said initial authenticating.

29. (Previously Presented) The system according to claim 25, wherein said at least one processor transparently transfers said initial authentication information to said second access point during a handoff of said access device from said first access point to said second access point.

30. (Previously Presented) The system according to claim 25, wherein said at least one processor transfers said initial authentication information to said third access point during a handoff of said access device from one of said first access point and said second access point to said third access point.

31. (Previously Presented) The system according to claim 25, wherein said at least one processor is an authentication processor, a switch processor, an access point processor and a server processor.

32. (New) The method according to claim 8, wherein said distributing of said initial authentication information to said second access point and said third takes place upon said access device initiating communication or authentication with said first access point.

33. (New) The method according to claim 32, comprising updating said initial authentication information within said first access point, said second access point or said third access point, wherein said updating is initiated by a different access device selected from any one of said first access point, said second access point and said third access point.

34. (New) The computer-readable media according to claim 18, wherein said distributing of said initial authentication information to said second access point and said third takes place upon said access device initiating communication or authentication with said first access point.

35. (New) The computer-readable media according to claim 34, comprising updating said initial authentication information within said first access point, said second access point or said third access point, wherein said updating is initiated by a different access device selected from any one of said first access point, said second access point and said third access point.

36. (New) The system according to claim 28, wherein said at least one processor distributes said initial authentication information to said second access point and said third, upon said access device initiates communication or authentication with said first access point.

37. (New) The system according to claim 36, wherein said initial authentication information within said first access point, said second access point or said third access point is updated by a different access device selected from any one of said first access point, said second access point and said third access point.